



May 24, 2002

***Via Electronic Mail ***

Mr. Dion Novak
Superfund Division
United States Environmental Protection Agency
77 West Jackson Boulevard
Mail Code: SR-6J
Chicago, Illinois 60604

Re: Draft Remedial Investigation/Feasibility Study (RI/FS) Work Plan
Eagle Zinc Company Site, Hillsboro, Illinois

Dear Mr. Novak:

This memorandum transmits proposed revisions to the draft RI/FW Work Plan (the "Work Plan") for the Eagle Zinc Company Site in "track changes" format. Initial comments on the Work Plan were provided orally to the Technical Group during the April 17, 2002 technical review meeting and were summarized in a letter from the Agency to Roy Ball of ENVIRON dated May 3, 2002. Additional USEPA comments concerning the QAPP were forwarded to ENVIRON on May 17, 2002 in a memorandum prepared by USEPA's Field Services Section.

This memorandum includes only those responses that pertain to the comments contained in the USEPA's May 3, 2002 letter. Responses to the USEPA's comments and appropriate document revisions will be transmitted to the USEPA shortly. The Agency's comments are repeated below in italics, followed by a response and a reference to the portion of the draft Work Plan that was modified in response to the comment.

1. *Page 1 Section A. Why was the workplan organized in this manner? As discussed, it should be organized to be consistent with the SOW with separate appendices for the QAPP and the HSP.*

As discussed during the meeting, the Work Plan has been reformatted such that the main body of the document contains three sections: Introduction, Remedial Investigation, and Feasibility Study. The Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP), Site Health and Safety Plan (HASP), and Baseline Risk Assessment Plan are now included in the Work Plan as appendices. In addition, all of the project tasks noted in the SOW are now discussed in the appropriate order in the Work Plan.

2. *Page 15 last par. This paragraph should be revised to remove the references to State standards. to be consistent with the Agency comment on the PSE report. An official request for ARARs will occur later in the RI/FS.*

As shown in the attached revisions, the section entitled "Evaluation of Existing Data" (now Section II.A.6) has been replaced with the exact language used in the PSE Report, which does not include references to State standards.

3. *Page 19 par 3. Please include a statement that when the piles are inspected and sampled, evidence for any off-site migration of pile soils will be properly investigated. This has not been an objective of past site inspections.*

A statement to this effect has been added to Section II.A.6.c of the Work Plan.

4. *Page 24 par 1. Please include the language from the SOW, page 8, which states that actual sampling numbers may increase as necessary if the initial sampling approach proves inadequate. The other items from the SOW, including site mapping, site legal description, access information, support facilities should also be included here. You indicated that existing site buildings would be used for on-site support-this should be included here with phone and other utility information.*

The statement from the SOW concerning the actual sampling numbers has been added to Section II.B.1. The other items listed above are discussed in the SOW under Task 1 (Investigative Support and Description of Current Situation). Therefore, this information has been included in Section II.A.7 of the Work Plan (Site Inspection and Access).

5. *Page 30 Section b. The text describing the comparison to TACO was removed from the PSE text and should also be removed here.*

The references to TACO standards have been removed from this section (now Section II.B.1.b.ii.).

6. *Page 34 Section b. There should be 16 sediment samples to be consistent with the SOW. We agreed that the location should be between sample locations 11 and 12.*

As discussed, the additional sediment sample is noted in Section II.B.2.a.ii and shown on Figure __ (attached).

7. *Page 40. The SOW called for a discussion of possible bench scale testing to evaluate treatment alternatives. This should be included here.*

Consistent with the SOW, possible bench scale testing is discussed as Task 4 in Section II.C.

8. *Page 43 Section III. Where is the data management plan contemplated in the SOW?*

Section B-10 of the QAPP ("Data Management"), which discusses data management procedures, will be modified in accordance with USEPA Region 5 guidance to include applicable data management elements.

9. *Page 45 par 2. Please include a statement that says if organics are identified as an issue, then supplemental sampling may be necessary for further characterization. Please provide the further clarification for the last portion of the paragraph that you provided at the April 17 meeting.*

The referenced statement and clarification have been added to Section C.1 of the FSP (Appendix A of the Work Plan).

10. *Page 46 par 1. Please add language stating that the duplicates will be collected from samples that show high readings.*

This statement has been added to Section C.2 of the FSP.

11. *Page 46 par 2. Should read 16 samples and revise the language to reflect what is stated in the SOW.*

This edit has been made to Section C.2 of the FSP.

12. *Page 47 top par. Sampling increments should include samples from the center of the piles- if the sampling equipment cannot reach the center, alternate sampling methods should be utilized.*

As discussed during the meeting, the central portions of the residue piles should be accessible using the excavation equipment proposed (i.e., trackhoe). The language in Section C.3 of the FSP (Appendix A) has been revised accordingly.

13. *Page 47 last par. What are the depths of the samples? Are they to the bottom of the stream channel? How deep is the stream channel? Will they be grab samples?*

The surface water samples will be collected as grab samples from the upper one to two inches of the water column in the ditch/stream. The ditch/stream channels are not expected to be more than a few inches deep. This information has been added to Section C.4 of the FSP (Appendix A).

14. *Page 48 par 2. Results from MW-A through MW-E should be included in the summary of data collected at the site. The temporary wells should be sampled and analyzed for the full contaminant list to determine if other contaminants of concern are present at these locations. These results can be used to help determine final monitoring well locations.*

The analytical data collected as part of the ongoing monitoring under the UST program will be provided to USEPA in the RI Report. Concerning the temporary wells, piezometric measurements and rapid-turnaround laboratory analyses of a selected group of indicator parameters (PCOCs) were proposed for the purpose of selecting the locations of additional monitoring wells. This was viewed as a screening process, roughly analogous to the PID and XRF screening proposed for the selection of soil samples for laboratory analysis. The SOW states: "Ground water screening samples may be collected from selected temporary wells to assist in the identification of locations for installation of additional permanent monitoring wells". Full-list analyses for screening samples were not envisioned by the Parties at the time that the SOW for the RI/FS was developed. As discussed in the PSE Report, the southwestern portion of the site has been identified as a Potential Area of Concern (PAOC) for ground water. In consideration of the Agency's request for a wider range of analyses, the Parties propose to collect ground water screening samples from 10 of the 20 temporary wells for analysis of TAL metals. In concert with the "full-list" data collected from the existing monitoring wells in 1998, the screening analyses and peizometric measurements are expected to provide the information needed to select the optimal locations for additional wells. Section C.5 of the FSP and pertinent sections in the main body of the Work Plan have been revised to reflect this approach.

15. *Page 52 last par. What is the criteria for the four foot depth selection? Please include in the text here.*

The depths of the soil borings will be based on the depth at which undisturbed, native soil is encountered. As such, the borings will be terminated either two feet below the disturbed/undisturbed interface or four feet below grade, whichever is deeper. Therefore, all borings will be at least four feet deep. This corresponds to the macro-core sampling tube length, which is four feet.

16. *Page 53 Section 2. Please include information in the text to highlight the intermittent nature of flow in the sediment drainageways. What is the depth of each sediment sample? Please also include information regarding sampling methods for dry and wet sampling. EPA is concerned about reproducibility of sampling locations by utilizing only the flags mentioned in the text. Some type of geolocator should be used so that locations can be reproduced at a later date, if necessary.*

The requested information, including the use a hand-held Global Positioning

only
TAL
metals
for screening
samples

System (GPS) unit to log the geographic coordinates of each sediment and surface water sample location, has been included in Section E.2 of the FSP.

17. *Page 54 par 1. EPA prefers that any particle size reduction be done in the lab.*

When required, particle size reduction will be performed at the laboratory as discussed in Section E.3.

18. *Page 55 par 2. Well development should be based on the stabilization of well purging parameters listed here, not just based on specific well volumes removed. This is not only true for sampling but also for well development.*

Agreed. Appropriate revisions have been made to Section E.5 of the FSP.

19. *Page 58 1st incomplete par. Where will the drums be stored on-site until disposal? How long will it take to dispose of drums-will the PRPs wait for a specific number of drums or dispose as each drum is filled?*

The drums will be stored in a covered, contained area to be furnished by Eagle Zinc Company. Applicable requirements will be observed for the storage of all investigation-derived wastes, including RCRA storage requirements, if wastes are determined to be hazardous. It should be noted that none of the investigation-derived wastes are expected to be hazardous. Appropriate revisions have been made to Section F.4 for clarification.

20. *Page 58 last par. PPE should be drummed and disposed of as special waste. Please modify this section to include what is listed in the SOW on page 12 and 13, Tasks 4 and 5 with respect to report preparation and other details listed there.*

See additional revisions to Section F.4. As noted above, the format of the main body of the document has been revised to more closely follow the format of the SOW.

21. *Page 59, Section IV. QAPP comments will be sent shortly from Region 5 QAS staff. Was current EPA Region 5 QAPP guidance utilized to prepare this QAPP?*

Revisions made to the QAPP in response to USEPA comments will be submitted to USEPA under separate cover.

22. *Page 60 2nd bullet. IEPA will not be approving the site QAPP.*

Appropriate edits were made to this section.

23. *Page 101 Section V. Guidance referenced in the SOW should be highlighted here.*

These guidance documents and regulations are now referenced the introductory section of the Site Health and Safety Plan (Appendix C). In addition, as discussed during the meeting, a map showing the route to the nearest hospital will be included in the Site Health and Safety Plan.

24. *Page 131 Section O. There should be a dedicated phone line for use during field work as well as a site location where records and meetings can be held. There should be a map to the hospital included here.*

In addition to the cellular telephone number of the HSC, telephone numbers for Eagle Zinc Company and ENVIRON's field office have been added to Section O.2 of the Site Health and Safety Plan. Actual numbers for ENVIRON's telephone lines will be inserted into the Health and Safety Plan and provided to USEPA and IEPA prior to mobilization to the site.

25. *Page 133 par 1. Please include the language from the SOW regarding applicable risk assessment guidance and include any updates here.*

These references have been added to Section A of the Baseline Risk Assessment Plan (Appendix D).

26. *Page 133 1st three bullets. Another potential exposure scenario would be for an on-site trespasser or future residential, as portions of the site may be redeveloped as a reasonably anticipated land use in the future.*

These potential exposure scenarios have been inserted in Section A of the Baseline Risk Assessment Plan. The future residential use scenario has been qualified as hypothetical, as residential development of the site is not permitted under current zoning ordinances.

27. *Page 135 subpart i. The off-site soil pathway has not been entirely precluded from risk management discussions and is predicated on results of on-site soil and residual waste pile sampling during the RI.*

A statement to this effect has been included in Section A.1.b.i of the Baseline Risk Assessment Plan.

28. *Page 143 Section VII. Formatting of this section is inconsistent with the SOW-please correct.*

This section has been reformatted to conform with the tasks outlined in the SOW.

29. *Page 143 par 2. All potential remedies listed in the presumptive remedy guidance referenced here should be included in this paragraph. The proper time to discuss the PR*

guidance is at the RI report meeting, where the PRPs may propose using only the PR guidance for the FS development. EPA can then decide if the proposal has merit.

A summary of the presumptive remedies for metals in soil and a statement as to when a presumptive remedy may be proposed for FS development have been included in Section III.A of the main body of the RI/FS Work Plan (Feasibility Study).

30. *Attachment 1, Figure I-1. TL Diamond owner information should be included here, similar to what was done for the PSE report.*

As done with the same figure in the PSE Report, this edit (added date of Eagle Zinc Company's purchase of the site) has been made to the Site History Timeline, which is now included in the work plan as Figure II-4.

Please do not hesitate to call me if you have any questions concerning these responses to the issues noted in the USEPA's May 3, 2002 letter or the corresponding revisions to the draft RI/FS Work Plan.

Sincerely,

ENVIRON International Corporation

F. Ross Jones, P.G.
Manager

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